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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,325	06/28/2000	Michael T. Moore	0325.00372	6269
21363	7590 04/08/2003			
CHRISTOP	HER P. MAIORANA, P	EXAMINER		
24025 GREATER MACK SUITE 200			NGUYEN, MIKE	
ST. CLAIR SHORES, MI 48080			ART UNIT	PAPER NUMBER
			2182	. '
			DATE MAILED: 04/08/2003	△

Please find below and/or attached an Office communication concerning this application or proceeding.

1

	Application No.	Applicant(s)			
	09/605,325	MOORE, MICHAEL T.			
Office Action Summary	Examiner	Art Unit			
	Mike Nguyen	2182			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1) Responsive to communication(s) filed on 01.	<u>/27/2003</u> .				
2a) ☐ This action is FINAL . 2b) ☑ T	a) ☐ This action is FINAL . 2b) ☑ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-20</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement. Application Papers					
9)☐ The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
 a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Office A	action Summary	Part of Paper No. 2			

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DETAILED ACTION

Notices & Remarks

- 1. Applicant's amendment file on 01/27/2003 in response to Examiner's Office Action has been reviewed. The following rejections now apply.
- 2. Claims 1-20 are pending for the examination.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-2, 4-6, 9, and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deming et al. (U.S. Pat. No. 5,864,486) in view of Wang et al. (U.S. Pat. No 6,448,820 B1).
- 5. As to claim 1, Taylor teaches an apparatus comprising:

a programmable logic circuit comprises a programmable logic device, a processor, and memory circuit in a single circuit (IC) package (see figure 5 element 25, 28, 27 and column 9 lines 66-67 and column 10 lines 1-17).

Although the apparatus taught by Taylor shows substantial features of the claimed invention (discussed above), it fails to explicitly teach: a wireless transceiver. Deming; however, teaches a wireless transceiver coupled to the programmable logic circuit (see figure 2 elements 20, 30, 40 and column 4 lines 2-14 wherein the elements 20, 30 are wireless communications and coupled to the in-system programmable logic device element 40). Given the teaching of Deming, a person having ordinary skill in the art would have readily recognized the desirability and

advantages of modifying Taylor by employing the well-known or conventional feature of the apparatus, such as taught by Deming, in order to utilize wireless transmission to facilitate programming of the programmable logic devices.

- 6. As to claim 2, Taylor teaches the apparatus according to claim 1, wherein said single integrated circuit package contains one or more integrated circuit dies (see figure 5).
- 7. As to claim 4, Deming teaches the apparatus according to claim 1, wherein said wireless transceiver is contained within said package (see column 1 lines 26-35).
- 8. As to claim 5, Deming teaches the apparatus according to claim 1, wherein said wireless transceiver communicates using either electromagnetic or ultrasonic waves (see column 2 lines 53-59).
- 9. As to claim 6, Deming teaches the apparatus according to claim 5, wherein said electromagnetic waves comprise radio signals or infrared light (see column 8 lines 39-60).
- As to claim 9, Taylor teaches the apparatus according to claim 1, wherein said processor 10. and said programmable logic device are implemented on a single die (see figure 2A).
- 11. As to claim 13, Taylor teaches the apparatus according to claim 1, wherein said programmable logic device comprises one or more memory elements (see figure 5).
- Claim 14 is of similar scope as claim 12 and is therefore rejected under same rationale. 12.
- 13. Claim 15 is of similar scope as claim 1 and is therefore rejected under same rational. Deming also teaches: (A) presenting programming to a wireless transceiver (see column 3 lines 43-48); and (B) programming a programmable a programmable logical circuit in response to said programming signal (see column 3 lines 43-52)
- 14. Claim 16 is of similar scope as claim 4 and is therefore rejected under same rationale.

15. Claim 17 is of similar scope as claims 10, 15 and is therefore rejected under same rationale.

Taylor also teaches: during a first bootup, configuring said programmable logic device as said processor in response to instructions stored in said memory circuit (see column 19-30)

- Claims 18-19 are of similar scope as claims 1, 4 and are therefore rejected under same 16. rationale.
- Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of 17. Deming and Wang as applied claim 1 above, and further in view of Schoniger et al.0 (U.S. Pat. No 6,401,224 B1).

As to claim 3, the combination of Taylor and Deming fails to explicitly teach a JEDEC standard integrated circuit package. Schoniger, however, teaches the integrated circuit comprises a JEDEC standard integrated circuit package (see column 33-42). Given the teaching of Schoniger, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the combination of Taylor and Deming by employing the well-known or conventional feature of the integrated circuit, such as taught by Schoniger, in order to cover the standardization of discrete semiconductor device.

18. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Taylor and Deming as applied claim 1 above, and further in view of Wang et al. (U.S. Pat. No 6,448,820 B1).

As per claims 10-12, the combination of Taylor and Deming fails explicitly to teach: said processor is selected from the group consisting of a microprocessor, a micro-controller or other processor, a digital signal processor, and instructions stored in said memory circuit for

configuring said programmable logical circuit as a processor; said instructions configure said programmable logic device as a device selected from the group consisting of a microprocessor, a micro-controller, and a digital signal processor; and said memory circuit comprises one or more non-volatile memory elements. Wang; however, teaches said processor is selected from the group consisting of a microprocessor, a micro-controller or other processor, a digital signal processor, and instructions stored in said memory circuit for configuring said programmable logical circuit as a processor (see column 3 lines 49-56); said instructions configure said programmable logic device as a device selected from the group consisting of a microprocessor, a micro-controller, and a digital signal processor (see column 3 lines 49-56); and said memory circuit comprises one or more non-volatile memory elements (see figure 1 element 105 and column 3 lines 61-65). Given the teaching of Wang, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the combination of Taylor and Deming by employing the well-known or conventional feature of the apparatus, such as taught by Wang, in order to provide controlled logic of the programmable logic circuit and protection of removed programs in the memory circuit.

19. Claims 7-8, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Deming and Wang as applied claims 1, and 18 above, and further in view of Philip S. Esnouf (U.S. Pat. No 5,364,108).

As per claims 7-8, and 20, the combination of Deming and Wang fails to explicitly teach: said wireless transceiver communicates through a device selected from the group consisting of an antenna, a light emitting/sensitive device, and an ultrasonic transducer; said light emitting/sensitive device comprises an infrared diode or other type or wavelength of light

emitting/sensitive diode or transistor; and a transducer coupled to said wireless transceiver. Esnouf; however, teaches the apparatus, wherein said wireless transceiver communicates through a device selected from the group consisting of an antenna, a light emitting/sensitive device, and an ultrasonic transducer (see figure 7 and column 11 lines 12-17 and column 13 lines 43-50); said light emitting/sensitive device comprises an infrared diode or other type or wavelength of light emitting/sensitive diode or transistor (see figure 7 and column 11 lines 12-17); and a transducer coupled to said wireless transceiver (see figure 7 and column 13 lines 43-50). Given the teaching of Esnouf, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying the combination of Deming and Wang by employing the well known or conventional feature of the apparatus, such as taught by Esnouf, in order to provide transforming signals.

Response to Arguments

20. Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Nguyen whose telephone number is (703) 305-5040 or email is mike.nguyen@uspto.gov. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

The appropriate fax number for the organization where this application or proceeding is assigned is (703) 746-7240.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeffrey Gaffin, can be reached on (703) 308-3301.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

Mike Nguyen Patent Examiner Group Art Unit 2182

04/01/2003

JEFFREY GAFFIN VISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100